

Week 1 Assignment - SRS

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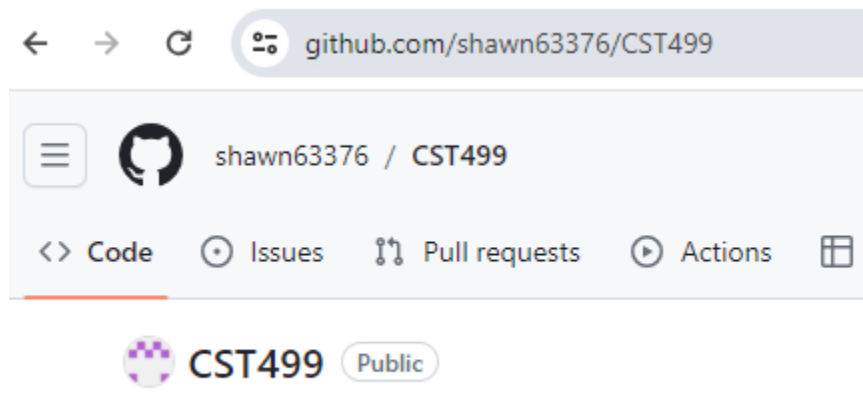
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February 5, 2024

GITHUB LINK:

<https://github.com/shawn63376/CST499>

GITHUB SCREENSHOT:



Software Requirements Specification for Enrollment Registration System

Version 1.0 approved

Prepared by Shawn R. Smith

UAGC

2/5/2024

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Revision History

| Name | Date | Reason For Changes | Version |
|-------------|--------|--------------------|---------|
| Shawn Smith | 2/5/24 | First Draft | 1.0 |
| | | | |

1. Introduction

1.1 Purpose

The purpose of this document is to define the Software Requirements Specification (SRS) for an Enrollment Registration System for an institution of higher education.

1.2 Document Conventions

- Italicized text indicates important notes or additional information.
- Bold text highlights key terms and concepts.
- Requirements are identified with unique REQ-* numbers.
- TBD represents information to be determined.

1.3 Intended Audience and Reading Suggestions

This SRS is intended for developers, project managers, marketing staff, users, testers, and documentation writers.

1.4 Product Scope

The Enrollment Registration System or ERS, allows students to create an account and profile for course registration. Students will be able to select available courses and also provide relevant contact information to the system. The ERS will function as an automated system to assist students with the course registration process. Students will also be able to place

themselves on a waitlist for courses that are already full and also be able to cancel registration for unwanted courses.

1.5 References

User interface style guide

Chikh, A., & Alajmi, H. (2014, January 17–19). *Towards a dynamic software requirements specification*

Tsui, F., Karam, O., & Bernal, B. (2018). *Essentials of software engineering* (4th ed.)

2. Overall Description

2.1 Product Perspective

The intended use of the ERS is a small part of a larger University Portal. The ERS stores student profile information and allows for course registration and course enrollment maintenance such as dropping a course.

2.2 Product Functions

- User account / profile creation
- User sign-in page
- Course registration
- Course registration cancellation
- Display list of enrolled courses

2.3 User Classes and Characteristics

- Instructor
- Administrator
- Student

2.4 Operating Environment

The ERS should be able to be used on any mobile or desktop device that supports modern web browsers such as Chrome, Safari or Edge.

2.5 Design and Implementation Constraints

Items not listed in section(s) 2.2, 4.1 or 4.2 of this document would be considered out of scope for this project

2.6 User Documentation

- Online help guide
- User FAQs larger university portal
- Live chatbot

2.7 Assumptions and Dependencies

- Course offering and availability database is up to date

3. External Interface Requirements

3.1 User Interfaces

- Intuitive and user-friendly interface designed for various screen sizes.
- Consistent design with the existing University Portal
- Accessible for users with disabilities.

3.2 Hardware Interfaces

- Support for both mobile and desktop devices from all major operating systems

3.3 Software Interfaces

- MySQL Database
- Apache
- PHP, HTML

3.4 Communications Interfaces

- HTTPS
- PHP Server-Side Code
- AES Encryption

4. System Features

4.1 New user registration including user account and profile creation

4.1.1 Description and Priority

High priority: Ability for user to create profile with a unique user ID.

4.1.2 Stimulus/Response Sequences

User creates new account and can provide values for user information such as name email and phone number to be stored.

4.1.3 Functional Requirements

REQ-1: New user registration including account and profile creation.

REQ-2: Each new user should have a unique ID associated with a password. The system should guard against two users using the same ID for registration.

REQ-3: Profiles must include some key information about the applicant including name, phone, email, and any other information deemed necessary.

REQ-4: Post registration, users can login to the system at any time using the ID and password created during the registration process.

4.2 System Feature 2

Course Enrollment

4.2.1 Description and Priority

High priority: Registered users can search for, enroll in or cancell enrollment in available courses.

4.2.2 Stimulus/Response Sequences

Users can search for and enroll in available courses. When user enrolls the number of enrollments for said course will increase by one. Users can also cancel course enrollment.

4.2.3 Functional Requirements

REQ-5: Online courses run through three semesters per year (spring/summer/fall), and students can list the courses that will be offered during any semester, as not all courses will be offered in every semester.

REQ-6: Each course should have a maximum number of enrollments that may be different depending on the course.

REQ-7: If a user wants to enroll into a course and the course is full, the student can add themselves onto a waiting list.

REQ-8: A user can also cancel the enrollment from any course that they are enrolled in.

5. Other Nonfunctional Requirements

5.1 Performance Requirements

The system should be able to complete student enrollments first come, first served. The system should be able to handle multiple registrations and task updates simultaneously and update the database accordingly.

5.2 Safety and Security Requirements

User data and product information must be protected against unauthorized access.

5.3 Software Quality Attributes

- The interface should be user-friendly and accessible for all users.
- The software should be maintainable and easily adaptable to future enhancements.

5.4 Business Rules

- Students cannot enroll in classes they have already completed successfully
- Students should only enroll in courses that are included in their degree program requirements
- There must be a Logout feature to protect user profile information

Appendix A: Glossary

ERS : Enrollment Registration System

Reference:

Chikh, A., & Alajmi, H. (2014, January 17–19). *Towards a dynamic software requirements specification*

Spillner, A., Linz, T., & Schaefer, H. (2014). *Software testing foundations: A study guide for the certified tester exam* (4th ed.). Rocky Nook.

Tsui, F., Karam, O., & Bernal, B. (2018). *Essentials of software engineering* (4th ed.)

Wiegers, K. E. (1999). *Software requirements specifications for <project> (Template)*